

Strategisnya manajemen insani dalam penyediaan guru yang berkualitas

David Livingstone Araro
(ararodavid@gmail.com)

Herry Sumual
(herrysumual@unima.ac.id)

Fientje J.A. Oentoe

Jeffry Sony Junus Lengkong
(Jeffrylengkong@unima.ac.id)

Viktory Nicodemus Joufree Rotty
Correspondence email: viktoryrotty@unima.ac.id

Program doctor Manejemen Pendidikan Guru
Pascasarjana Universitas Negeri Manado

ABSTRACT

The educational goals to be achieved include all aspects, both faith, personality, intelligence, and skills. Education seeks to create a superior personality marked by progress in all areas of life, whether spiritual, personality, intelligence, or skills, all of which will benefit students, the environment in which they interact, and also for the progress of the nation and state. This research was conducted using a qualitative descriptive approach. Sugiyono explained the characteristics of qualitative research methods as follows: "Qualitative research methods are research methods based on the philosophy of postpositivism, used to examine the condition of natural objects (as opposed to experiments), where the researcher is the key instrument, the sampling of data sources is carried out purposively. and snowball, data collection techniques with triangulation (combined), and inductive/qualitative data analysis, and qualitative research results emphasize meaning rather than generalization". The results show that SGS has made plans but still needs improvement. The planning process for all human management activities which include teacher procurement, teacher development,

Keywords: Management guru. Pendidikan, Star Generation School, Bitung

According to Wukir "human management is part of management science related to human resource management including policies and practices that need to be implemented by a manager" (2013: 49). This means that the understanding of human management is rooted in two things, namely the basic concept of management and a human perspective. The description of management has been explained in the previous section when discussing the basic concepts of management in the discussion of education management. Next, the researcher will explain the concept of humans in organizations. As explained in chapter one, human management has the same basic substance as personnel management and human resource management. The basic difference between human management, personnel management and human resource management lies in the way of viewing the identity and potential of humans as human beings in the organization. Therefore, an understanding of the meaning of human management must be preceded by a correct understanding of humans as human beings.

Every organization needs people to run the organization. Kashmir states, "without humans no company can carry out its activities" (2015:5). Almasri stated that human resources are "workers who

occupy a position or people who have the responsibility to carry out tasks or work in a particular organization" (2016: 134). It was further stated that, "the important thing for the organization to pay attention to is how to obtain workers according to the needs and positions they will occupy, how to develop them, use and evaluate the results of their work" (2016: 135). From the description above, it can be seen that the use of the word "labor" refers to human resources. According to researchers, The use of the term labor is caused by the paradigm that views the main human resource as energy or physical. In the beginning, human power was very dominant in the work. However, as technology develops, it is finally understood that human power is only one element of resources among other elements in humans that can be optimized for organizational progress.

The strategy of human management in providing quality teachers can also be understood through the research of Elton Mayo, a psychologist from Harvard who released research results with the term "hawthorne experiment". He found the results that the positive attitudes and behaviors and productivity of employees were not so much influenced by the facilities and working conditions, but by the attention paid to them by management. Furthermore, it was stated that the behavior of a worker is largely determined by and bound to the norms of the work group in which a person is a member (Siagian, 2016:39). When interpreted in the context of a school, this means that if there is no good human management, the attitude, positive behavior and productivity of teachers in carrying out their duties as educators will be low, or in other words, the quality of teachers will be low.

The educational goals to be achieved include all aspects, both faith, personality, intelligence, and skills. Education seeks to create a superior personality marked by progress in all areas of life, whether spiritual, personality, intelligence, or skills, all of which will benefit students, the environment in which they interact, and also for the progress of the nation and state.

RESEARCH METHODS

This research was conducted using a qualitative descriptive approach. Sugiyono explained the characteristics of qualitative research methods as follows: "Qualitative research methods are research methods based on the philosophy of postpositivism, used to examine the condition of natural objects (as opposed to experiments), where the researcher is the key instrument, the sampling of data sources is carried out purposively. and snowball, data collection techniques with triangulation (combined), and inductive/qualitative data analysis, and qualitative research results emphasize meaning rather than generalization" (2015:15)

"Data collection techniques are the most important step in research, because the main purpose of research is to obtain data. Without knowing the data collection technique, the researcher will not get data that meets the data standards set" (2015:308).

DISCUSSION

In this section, a researcher's study of the human management process at SGS will be presented. The presentation of the study follows the same systematics as in the previous section, which discusses the planning, implementation, and monitoring and evaluation of human management which includes activities of procurement, development, compensation, maintenance, and separation of teachers.

1. Studies on Human Management Planning at SGS

a. Teacher Procurement Planning

From interviews with the Foundation, it was also known that recruitment was also carried out through advertisements on social media. And there are quite a number of prospective teachers submitting applications, where their application files are submitted via SGS Opportunity email. On average, the prospective teachers who apply do know SGS through advertisements uploaded on social media. However, none of the many applicants ended up becoming a teacher at SGS.

b. Application

- c. The admission process at SGS is not uniform. Six people admitted that they submitted their application to the SGS Foundation. While the other four people stated that they did not submit the application documents. The four people who did not submit their application documents all had direct links to the Foundation's management. While the sixth that includes the application file with a somewhat varied type of document. JL included two documents, including: a reference letter from his old school, and the last diploma, which at that time was still in high school. It is different with YM, according to him, at first he submitted a job application to teach

at one of the English language courses that will be opened in Bitung city. However, because the course has not yet been opened, the owner (the owner of the course) who is also one of the supervisors at the Bitung city education office brought YM to SGS and met with one of the Foundation's administrators. The application file that has been submitted to the course is brought to be submitted to SGS. The documents brought are the latest diploma, Bachelor of Philosophy from STF Pineleng, and biodata. For FW, Db, St, and FS, they submit similar application documents, namely: application letter, bilingual version of biodata (Indonesian – English), ID card, diploma and transcripts, and video micro teaching. The FW certificate at the time of admission was a high school diploma because he had not yet completed his full English undergraduate education. Just waiting for the test he said. Meanwhile, Db has a bachelor's degree in Christian education. St has a bachelor's degree in English education from Davao, while FS has a bachelor's degree in physics from Sam Ratulangi University. They also included video micro teaching using English as the language of instruction.

d. Selection

After the process of entering the application document, it is now entered in the selection process. The selection process followed by the teachers was an interview. However, of the ten teachers who became informants, seven teachers underwent interviews. While the other three did not participate in the interview. The teachers who participated in the interview included JL, FW, Db, St, FM, YM, FS. Meanwhile, the three who did not participate in the interview were SH, CS, SW. The three teachers who did not participate in the interview process were also those who did not submit application documents. However, there is one informant – FM who actually did not submit the application documents but was interviewed.

Of the seven teachers interviewed, five of them admitted that the waiting time interval from the process of submitting the application documents to being interviewed was quite short, around one to two weeks. There were only two informants who stated that the waiting time was quite long. St, entered the application documents and because it had been more than two weeks there was no response, he immediately came to SGS and met with the admin. Meanwhile JL stated that he submitted his application documents in September, but will be interviewed in December. The one who conducted the interview was the Foundation, in this case DHB.

The contents of the interview between the Foundation and prospective teachers include several things, namely: first, the Foundation asks about the reasons or motives for wanting to work as a teacher at SGS. Second, they were asked about their educational background and their achievements during education. third, then asked about family background. How is the family situation, do you still have complete parents; how many siblings? Fourth, if you have worked before, you will be asked the reason for leaving your previous workplace; then how long worked in the previous place; what was the type of work in the previous workplace; If, for example, your previous work background is a teacher, you will be asked what subjects you have taught, how long you have taught those subjects, and the school where you taught before. Fifth, also asked about the religion of the informants. For Christians, they were asked further about the status of the congregation, as well as how active they are in worship. They were also asked about the services carried out in the church where they attend. Sixth, then asked about the ability to speak English. When asking about English language skills, the Foundation usually asks applicants to demonstrate their English language skills by conducting teaching simulations using English in front of the Foundation conducting interviews. Seventh, the Foundation also asked about the expected salary he would like to receive. Eighth, the Foundation also asked about his understanding and idealism regarding education. Ninth, for those who are not married, the Foundation also asks about their dating status and plans to start a family. For Christians, they were asked further about the status of the congregation, as well as how active they are in worship. They were also asked about the services carried out in the church where they attend. Sixth, then asked about the ability to speak English. When asking about English language skills, the Foundation usually asks applicants to demonstrate their English language skills by conducting teaching simulations using English in front of the Foundation conducting interviews. Seventh, the Foundation also asked about the expected salary he

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The nine questions were asked in various ways to prospective teachers who were interviewed. The duration of time taken in the interview between one to two hours.

e. Admission & Placement

After going through the interview process, on average the prospective teachers interviewed by the Foundation were accepted. Some teachers who are not accepted, even though they have submitted their application documents, are usually caused by mismatches in salary and working hours. There are also those who resign, in the sense that they have been interviewed by the

Foundation but then decide not to continue with their plans to work at SGS without a clear reason. The teachers who had been interviewed were then directed by the Foundation to start working immediately but with the status of teacher training. Although out of ten informants, the status as a training teacher was only conveyed to three informants. Meanwhile, the other seven informants did not hear information about the term teacher training.

Teachers who have been accepted do not immediately sign a contract with the Foundation. Of the ten informants, nine signed a contract with the Foundation, while one person, namely SH, did not sign a contract. SH was not aware of the existence of the contract. However, the signing of the contract will be carried out no later than six months of work. There are two people, namely Db and St, who signed a contract after six months, while the others later signed a contract after more than one year of teaching. The contents of the contract include: determination of employee status, determination of compensation in the form of salary, benefits such as THR and performance allowances.

After being accepted as a teacher at SGS, on the first day of school, the new teacher is introduced by the Foundation to the teachers and staff in the morning devotion or afternoon devotion. Then immediately asked to enter the class. If a new teacher joins SGS at the beginning of the school year, he or she will immediately start teaching according to the schedule. If the teacher enters in the middle of the school year, then the teacher will be the companion of the old teacher. An explanation of the duties and responsibilities is given in general at the time of introduction. The submission includes, what class will you teach and with whom; directions to teach bilingually by using more English; as well as regarding the discipline of arrival at school. The study of teacher procurement planning includes a study of the design and analysis of teacher planning, recruitment planning, selection planning, and teacher recruitment and placement planning.

Planning conditions that are incidental and unsystematic will have a negative impact on schools. The negative impacts include: not getting the number of teachers that best suits the needs of SGS. It could be that the number of teachers becomes too many, which burdens the school in financing, or the number of teachers is too few so that many teachers are overburdened. This happened at SGS and it was proven by the complaints from informants about too many assignments and double jobs. Another negative impact is panic in the procurement of teachers. This panic will cause a domino effect. Panic will have an impact on the low quality of the recruitment and selection process. Because it is demanded with an urgent need, causing compromise in the recruitment and selection process. Compromise in the recruitment process in the form of lowering the standard requirements. Meanwhile, compromise in the selection process takes the form of making the selection process just a formality. The recruitment and selection process that has many compromises will have an impact on getting teachers who do not meet the expected qualifications.

Third, The foundation did not carry out job analysis properly. This is indicated by the unavailability of document products as a result of job analysis. The three documents include job descriptions, job specifications, and job performance standards. The absence of these three documents will have an impact on the next process of human management. The absence of a job description creates confusion for teachers, more specifically home room teachers and school principals. And this has been proven through statements from several informants who said that they did not know exactly what to do when they started working. Moreover, many teachers who join SGS are fresh graduates who have no teaching experience.

Job specificationsexplains about the profile of a job, where through understanding the job profile it can finally be known what requirements must be met by applicants in the recruitment process. Job specifications are also required during the selection process. Because by understanding what qualifications are needed in a job, the person making the selection will know what things to pay attention to in the selection process.

The third document, namely job performance standards, has an impact on teacher compensation and maintenance. The absence of performance standards causes teacher performance measures to be biased. As a result, it is difficult to provide compensation in the form of allowances because there is no measure. In addition, because there is no performance appraisal, giving a promotion or demotion will be a subjective act. Subjectivity in the organization has a negative impact on the aspect of conduciveness. Lack of a sense of fairness will lead to a decrease in work motivation and job

satisfaction. This condition will then have an impact on the decline in the performance of teachers. In addition, an unhealthy culture will be formed, namely the culture of looking for faces or as long as the father is happy.

Recruitment

There are several things that researchers highlight in relation to recruitment planning, namely: first, teacher recruitment planning at SGS is incidental. From information from Foundation representatives, it is known that planning for recruitment involving Foundation management is only carried out at the beginning when starting kindergarten, and when starting junior high school. In addition, recruitment is carried out sporadically by representatives of the Foundation, in this case DHB. So recruitment planning is not an activity that is carried out regularly, scheduled and sustainable. It is only when necessary that a meeting is held, then discussed matters that are considered important. Even more Foundation representatives carry out their own planning of recruitment plans.

Second, in the statement of the Foundation's representative, it was known that nothing in the plan carried out recruitment using the referral method. In fact, if you pay attention to the information from the informants, it is known that all of the informants joined SGS because they received information from insiders whether it was direct (first person), or indirect (second person). That means that teachers who join SGS are recruited by the referral method. According to Hanggreini, the referral method is a way of collecting candidates based on recommendations from previous workers (Hanggreiny, 2012: 56). In the context of SGS, it is proven that the teachers recommended by previous teachers have quite good qualifications. However, SGS has not maximized this method. The basis for this opinion is that recruitment with this referral method is only carried out incidentally without planning. In an informal conversation, the Foundation representative asked the teachers if any of their friends had teaching skills? If there is, may be directed to apply at SGS. In the opinion of the researcher, this referral method should be maximized by: The SGS Foundation officially announces the opening of teacher job vacancies at SGS. Information about these vacancies contains the number of teachers needed, teacher qualifications required, compensation received, how to submit application documents, and who the contact person is. In addition to providing clear information about recruitment, SGS can also provide a stimulus to successful teachers, not only referencing their relationships, but if the referenced teacher candidate is finally deemed to meet the qualifications so that it is accepted by the Foundation. With this clarity and stimulus, it is hoped that the recruitment method using referrals can work well. For this reason, it is necessary to carry out careful planning in the application of recruitment with the referral method so that the results can be optimal.

Third, There were no application document requirements related to the spiritual aspects of prospective teachers. Whereas in planning the qualifications of teachers desired by SGS, one of the desired criteria is listed as having good spirituality. In the existing application documents as well as information from the Foundation's representative informants and teachers, there are no application documents that provide information about the spirituality of prospective teachers such as a certificate of active worship from the Pastor, or a certificate of involvement in ecclesiastical services.

Fourth, There is no application document related to the call as a teacher even though the call plays an important role in the professionalism and resilience of the teacher in carrying out his duties. In the information from teacher informants, they found a lot of information about dissatisfaction both in terms of compensation received, workload, unclear system, and many other things. However, teachers still have the motivation to survive and carry out their duties well. All of this is caused by the factor of his calling as a teacher. Therefore, the researcher believes that the application document should contain a teacher's testimony about his calling as an educator.

Fifth, from the results of the study it was found that there was no written document regarding recruitment planning. There is only an oral statement from a representative of the Foundation about what things are planned in the recruitment process. In addition, incomplete planning was also found. Taking into account the theoretical study that good planning should answer questions in the 5W + 1H pattern. For example, in the aspect of When or when. In planning there is no clarity about when this recruitment starts and how long it will take for the recruitment process. Is it only until before the school year starts, or is this recruitment open continuously until the required number of teachers has been reached. Then in the aspect of Who or who. In the planning, it is not explained in detail about who will make application advertisements through social media. Who will cooperate with schools to recruit fresh

graduates? Who will cooperate with an organization like PELMAP?

Then the aspect of How or how is not yet clear. For example, what is the online recruitment procedure? If posted through a facebook account, how to respond to people who ask through the comments column? If there is an email, how to give feedback to applicants who enter incomplete application documents? Meanwhile, the how aspect is recruited through schools: how to follow up on cooperation with schools? What are the recruitment techniques? Is it giving out flyers in school wall magazines? Or how? In addition, if the recruitment is carried out through a certain organization, what is the recruitment procedure? How is the socialization? There is a lot that goes unanswered in hiring planning.

Selection

There are two things that can be highlighted in relation to selection planning, namely: selection planning procedures, and selection planning documents. Next, the researcher will describe one by one.

According to the researcher's study, the teacher selection planning procedure at SGS is incidental and needs to be improved. The reasons are: first, related to the parties

involved in the preparation of the selection plan. Similar to recruitment, selection planning only involves representatives of the Foundation. The principal was not involved in planning the selection process. In fact, as the researchers described earlier, the principal is the person who understands the conditions of the school the best. In addition, the principal also quite understands what teacher qualifications are needed by the school. Without the involvement of the principal in the preparation of the selection plan, consideration will only come from representatives of the Foundation, which in the opinion of the researcher does not get comprehensive consideration. Second, the timing of the implementation of the selection planning is sudden and urgent because it is already pressed by the need for teachers. So there is no systematic and sustainable planning. In fact, this selection planning should be carried out on an ongoing basis because it considers aspects of the school's progress and dynamics internally, and external conditions. This means that the internal and external aspects of schools in 2018 will definitely not be the same as 2022. For example, planning for conducting interviews before the pandemic and during the pandemic may not be the same. Before the pandemic it can be done face-to-face, while during the pandemic it can be done virtually. In fact, this selection planning should be carried out on an ongoing basis because it considers aspects of the school's progress and dynamics internally, and external conditions. This means that the internal and external aspects of schools in 2018 will definitely not be the same as 2022. For example, planning for conducting interviews before the pandemic and during the pandemic may not be the same. Before the pandemic it can be done face-to-face, while during the pandemic it can be done virtually. In fact, this selection planning should be carried out on an ongoing basis because it considers aspects of the school's progress and dynamics internally, and external conditions. This means that the internal and external aspects of schools in 2018 will definitely not be the same as 2022. For example, planning for conducting interviews before the pandemic and during the pandemic may not be the same. Before the pandemic it can be done face-to-face, while during the pandemic it can be done virtually. planning for conducting interviews before the pandemic and during the pandemic may not be the same. Before the pandemic it can be done face-to-face, while during the pandemic it can be done virtually. planning for conducting interviews before the pandemic and during the pandemic may not be the same. Before the pandemic it can be done face-to-face, while during the pandemic it can be done virtually.

Studies on selection planning can also be seen through the selection planning document. From the statement of the Foundation's representatives, it was known that the selection planning was only recorded in the personal records of the Foundation's representatives, not in the form of archived documents and socialized to principals and teachers. According to researchers, this is not an ideal thing and continues to be allowed. Planning documents that are not archived properly will cause the evaluation of the planning to not be carried out properly. Meanwhile, unfiled documents caused problems in socializing to principals and teachers about the teacher selection procedure at SGS. Whereas with an understanding of the teacher selection procedure by principals and teachers,

The study of the selection planning document is also related to the content of the document. As previously stated, good planning must answer questions with a 5W + 1H pattern. From the information presented by representatives of the Foundation, it is known that there are several aspects that have not been considered in the preparation of the selection plan. Among other things, aspects of Who or who.

In this case, who will be responsible for selecting the application file and stating that the candidate or applicant has application documents that can be submitted at the next selection stage. In addition, the planning document does not mention who will conduct the interviews? Who will judge the video micro teaching? Another aspect is the question of when, how long, how many times the interview was conducted. In addition, the description of the selection planning does not explain what aspects. What are the criteria for the application documents that are considered to have met the requirements. What are the criteria for video micro teaching that are considered to meet the requirements. What are the criteria for applicants who can pass the selection from the interview process. In addition, researchers can also highlight aspects of when or time. The planning document should clearly talk about the timing of each stage of the selection process.

Placement and Admission

Similar to recruitment and selection planning, placement and recruitment planning also has the same problem. The first problem relates to the absence of principals in planning for teacher placement and recruitment. The second problem relates to the placement and acceptance planning documents that are not archived and well-documented, as well as the incomplete content of the placement and acceptance planning.

Teacher Development Planning

There are five things that the researchers focus on regarding teacher training and development planning, namely: the absence of principals' involvement; incidental planning; planning documents that are not well documented; incomplete document contents discussing planning aspects; as well as planning for development programs. Researchers will describe one by one as follows:

First, regarding the involvement of principals and teachers in planning development programs. Paying attention to Hanggreini's opinion about the steps in preparing training and development programs where needs analysis is the earliest stage that must be carried out. Next is the preparation of training and development objectives. The third stage is to create a program, including what materials will be provided when the training and development program is carried out. The last stage is the implementation of the evaluation (2012:99). All of these stages are important and interrelated. The stages of needs analysis will affect the determination of training and development objectives. Clear goals will facilitate the creation of programs and materials to be provided.

In relation to the involvement of principals and teachers in training and development planning, the researcher argues that without the involvement of principals and teachers, the stages of needs analysis will not be carried out properly. In other words, involving principals and teachers in teacher development planning is a must. Principals and teachers are important sources of information to carry out a needs analysis on areas that need to be trained and developed. Without the involvement of principals and teachers, training and development programs will not be well targeted and even redundant.

Second, from the information submitted by representatives of the Foundation as well as principals and teachers, the researcher believes that the implementation of the training and development program is incidental. This can be seen in the curriculum strengthening program which is a collaboration between the SGS Foundation and the Bitung City Education Office. Actually there are no plans to hold such activities. However, in a meeting with the Department, the program was finally implemented. Another program that is incidental in nature is the Mentari program. This program was implemented because the Mentari provider offered books to the Foundation and was then approved by the Foundation. Furthermore, to apply the Mentari curriculum, a curriculum strengthening program based on the Mentari book was made. Regardless of whether or not the curriculum strengthening program was implemented in collaboration with the Bitung City Education Office and the Mentari provider, it appears that the training and development program is incidental. SGS should have followed the guidelines for developing a training program proposed by Hanggreini. On the one hand, flexibility is also needed to be able to adapt to a dynamic context, however, good planning will guide the procurement and implementation of development programs that are targeted and according to needs.

Third, Unfiled training and development program planning documents will cause difficulties at the next management stage, namely the implementation and monitoring of evaluations. In the absence of properly archived planning documents, implementation will depend heavily on Foundation representatives who plan training and development programs. Dependence can have an impact on

overburden conditions that will be experienced by Foundation representatives, on the other hand it will reduce the level of participation of others in the implementation of training and development programs. In addition, the absence of good documentation and archives will have an impact on the implementation of the evaluation of training and development programs because it is not known what things must be evaluated.

Fourth, The contents of the development planning document are still incomplete and do not answer all aspects of planning that must be known. For example the Why aspect or questions about the reasons and objectives of implementing the development program. Aspects of what or what programs should be done. The who aspect is about who should carry out training and development. There is also a when aspect of when, how long, how many times the training and development program is implemented. The where aspect is about where the program is implemented. The last is the how aspect or how the training and development program procedures are carried out.

Fifth, program planning does not specifically address the development program. The training program is aimed at strengthening the ability of teachers to carry out the tasks they are currently working on, while the development program aims to prepare teachers for future tasks. The development program implemented by SGS is still focused on training programs with the aim of preparing teachers to carry out their current duties. According to the researcher, to be able to compete with other educational institutions, SGS must prepare itself to face developments in the world of education that are accelerative as a result of the industrial revolution 4.0 and the social revolution 5.0. This development requires SGS to become a digital technology-based school.

In addition to having an impact on learning, child psychology, and parental resistance, termination of teacher employment if not handled properly can even result in dissatisfaction which can lead to legal proceedings. This condition can reduce the image of the school in the eyes of the community. Even the school's energy will be drained if it trips over legal problems.

2. Studies on the Implementation of Human Management at SGS

Similar to when reviewing the planning function, the study of the implementation function of human management at SGS will also follow the previous pattern, namely reviewing the implementation of procurement, development, compensation, maintenance, and separation of teachers.

Teacher Procurement

From the information obtained by the researcher, it is known that there are several things that are findings and need to be studied: First, the recruitment method has not been implemented optimally because it still relies heavily on referrals. As previously stated, all of the existing teachers joined SGS through references from people who were already familiar with SGS.

The referral method isn't wrong, but it's not the only one. In addition, if this method becomes a mainstay for a long period of time, several things will happen, namely: the shortage of people with the qualifications needed by SGS to become teachers. There are no more qualified people who can be recommended by insiders. In addition, people who are referred by insiders will usually pose a psychological dilemma in the recruitment and selection process. Subjectivity will be very dominant when giving an assessment. Moreover, if the referenced is a Foundation person, or recommended by an important person, it will make the recruitment and selection process even more difficult. As a result, the selection and recruitment process will only become a mere formality.

According to the researcher, SGS needs to optimize recruitment through advertising on social media. This should be done to expand the area of selection of prospective teachers. The researcher assumes that there are many people who have the qualifications required by SGS to become teachers but are still not connected to SGS. With advertisements on social media, the selection of prospective teachers can reach many people but is very efficient because the costs are very small.

Second, Procurement of teachers is still very dependent on representatives of the Foundation, where the involvement of principals and teachers is still lacking. In the opinion of the researcher, principals and teachers can be involved even in the roles and limitations that have been considered beforehand. Indeed, if the recruitment and procurement of teachers will be fully borne by the principal and teachers, it will increase the burden on the principal and teachers. However, if the involvement of principals and teachers is in the right portion, it will have a positive impact. The involvement of

principals and teachers will further encourage the school's sense of belonging because there is a sense of being more meaningful because they are involved in school progress. In addition to the involvement of principals and teachers, SGS should start preparing a Human Capital Department that will specifically handle the human management process at SGS.

Third, from the information of the informants, it turns out that the procurement process which includes recruitment, selection, and acceptance is not standardized properly. There are teachers who have been accepted without an interview process, there are even teachers who have worked at SGS but have not submitted their application files until now. In terms of acceptance, it turns out that there are teachers who have signed a work contract, while some have not yet signed a work contract. This condition has an impact on the unequal qualifications and competencies of teachers at SGS. There are teachers who are accepted because they have proper qualifications and competencies, some are accepted but only have modest qualifications and competencies.

This situation causes difficulties in achieving standardization and uniformity in the quality of education at SGS. Differences in teacher quality will have an impact on variations in the quality of education in each class or in each subject. For example, because third grade elementary school teachers have good quality, the quality of third grade learning is also good, so third grade students are smarter than fourth grade students who have less qualified teachers. In addition, qualified teachers will be excellent in a negative sense. Many tasks and jobs were assigned to him because it was considered that only he had the capacity to carry out these tasks. This can cause jealousy from his fellow teachers, or it can also cause overburden for the teacher because he has to carry out responsibilities beyond his abilities.

Teacher Development

There are several things that are of concern to researchers in connection with the implementation of teacher development programs, namely:

First, need to evaluate existing training programs. The programs that have been implemented include: English club, In House Training, I Walk With God character curriculum training, Learning Management System training from Ruang Guru, Mentari curriculum training, Government curriculum training by the Bitung City Education Office. From the information that the researchers got, the English language training program called the English Club did not run well. The program had no measurable goals, had no planned curriculum, was implemented inconsistently, and finally ended in just two months. This training program needs to be maintained and even better maximized because one of the highlights at SGS is bilingual learning which tends to be active English with the motto English First.

Furthermore, the I Walk With God character curriculum training program needs to be held again. From information from the Foundation and teachers, it is known that character curriculum training is only carried out twice, namely at the beginning of the 2016-2017 and 2017-2018 school years. This program needs to be re-implemented because it is related to other advantages of SGS. In addition to being bilingual, SGS is a school that defines character strengthening as one of the best. According to the informant, the character curriculum training is the result of the collaboration between SGS and the Tunas Bangsa Foundation. To be applicable, Tunas Bangsa Foundation carries out a training package containing the I Walk With God student and teacher book, a guide to the implementation of character assessment, as well as mentoring for teachers in using the I Walk With God book and character assessment books.

Furthermore, the Learning Management System from Ruang Guru and the Mentari curriculum need to be reviewed by the SGS Foundation. If it is still relevant to the needs, it is recommended that the implementation of the training should be carried out before the start of the new school year. This is intended so that teachers are ready in advance to apply this curriculum in learning. It was obtained information that although Ruang Guru had conducted training, many teachers did not use learning based on the learning management system from the teacher's room. Likewise with the Mentari curriculum, there are still many teachers who have difficulty applying this curriculum.

Second, From the results of interviews with informants, both Foundation and teachers, it is known that many teachers at SGS are fresh graduates who still lack teaching experience. Meanwhile, until now the teacher training program that touches on classroom mastery and management skills has not been implemented. From the information from the informants who were fresh graduates, they felt overwhelmed in dealing with students. Many are stressed by this situation that prevents them from

carrying out high-performance tasks. They have a bachelor's degree in education, but practical skills in classroom control and management need to be trained so that they are ready to carry out their duties, let alone become home room teachers.

Third, still related to the second matter, it is necessary to carry out training programs and develop leadership and management skills. Being a teacher, let alone being a school principal, is required to have good leadership and management skills. Without these two soft skills, teachers will have difficulty carrying out their duties as educators. With leadership skills, teachers have the authority to carry out their roles as educators, instructors, trainers, assessors as mandated by law. Meanwhile, with good management skills, teachers can manage their learning and teacher tasks optimally.

Fourth, With the industrial revolution 4.0, it has even entered the 5.0 social revolution, requiring teachers to have mastery of skills in the field of information technology. Many experts state that as a result of the industrial revolution 4.0 and even the 5.0 social revolution, there has been disruption in the education sector. A technology-based learning approach has become a necessity in today's learning implementation. If the teacher does not have the provision of mastery of information technology, the teacher will have difficulty carrying out his duties as a teacher.

Compensation

Almost all the teachers interviewed were dissatisfied with the compensation received. This condition must be taken seriously by the Foundation because it will have an effect on several things, including: decreased motivation and job satisfaction which has an impact on the performance of teachers; the creation of a gap between the teacher community and the Foundation which results in the creation of an environment that is not conducive due to a less harmonious and suspicious relationship; the high desire of the teachers to end their employment relationship, so that SGS could lose its best teachers because they moved to other schools that offered more profitable salaries and benefits.

Maintenance

There are several things that are of concern to researchers in connection with maintenance activities, namely:

First, SGS must design and implement a clear career system for teachers at SGS. This career system will encourage teachers to work at SGS for a long period of time even into retirement. With the insight into thinking for long-term work, it creates psychological stability for teachers to work diligently. In addition, with a clear career system, teachers will not hesitate to bring out their best abilities because they feel that everything they will do will not be ignored by the Foundation, even if they will get Foundation awards through promotion policies. Meanwhile, with a clear career system, it indirectly warns teachers who are less professional because there is demotion for those who do not work well.

Second, SGS has held a spirituality program as a way of nurturing teachers. As explained in the previous section, humans must be seen not only as one of the same resources as other resources, but humans are human beings who have moral and spiritual aspects. Human needs are not only in the physical aspect, but also in the spiritual aspect. From interviews with teachers, a unique and anomaly fact was obtained. Almost all teachers are not satisfied with the compensation. However, only one has low work motivation, other than that it is moderate or even high. Even the lowly motivated teacher is still working professionally. According to the researcher, this is caused by the spiritual aspect, namely the awareness that educating children is a call from God that he must do as a form of his faith and love for God. Therefore, even though the compensation has not been satisfactory, there are various challenges and struggles related to their duties and responsibilities, the teachers still carry out their profession well. Therefore, it is hoped that the spiritual program that has been carried out so far will be maintained and even maximized its implementation so that it is more useful.

Third, some teachers feel overwhelmed by the workload they have to carry. Therefore, the implementation of teacher counseling needs to be done to enable teachers to deal with stress at work.

Teacher Separation

As previously stated, many teachers have resigned from SGS. Some who resign due to differences of opinion between teachers and the Foundation. After resigning, the teachers felt they were being treated unfairly by the Foundation. Meanwhile, the Foundation also feels that the teacher who has resigned has not been treated well. Therefore, the provision of a teacher separation system is a non-negotiable necessity.

Study on Monitoring & Evaluation

Of the three human management functions at SGS, monitoring and evaluation are the least concerned. Actually, monitoring is carried out directly by representatives of the Foundation. However, the monitoring carried out so far is not related to human management. The focus of monitoring by representatives of the Foundation on the implementation of learning and school programs. From the Foundation's information, it was obtained information that the supervision of teacher procurement activities, teacher development, compensation for teachers, teacher maintenance, and teacher separation took place naturally and was not a priority. In fact, strengthening human management through the implementation of managerial functions on operational functions will have a positive effect on the quality of education at SGS. It has been described previously that the quality of education in schools is highly dependent on the quality of teachers. If the SGS teachers are managed properly, the teacher's performance will increase which in turn can encourage an increase in the quality of education at SGS. Monitoring is a way of management to ensure that what is planned goes as it should. Monitoring is also useful so that appropriate steps can be taken if the implementation of the plan needs adjustments and adaptations due to the situation and conditions. In other words, monitoring will make the implementation of the plan controlled but still flexible under dynamic conditions. Monitoring is a way of management to ensure that what is planned goes as it should. Monitoring is also useful so that appropriate steps can be taken if the implementation of the plan needs adjustments and adaptations due to the situation and conditions. In other words, monitoring will make the implementation of the plan controlled but still flexible under dynamic conditions. Monitoring is a way of management to ensure that what is planned goes as it should. Monitoring is also useful so that appropriate steps can be taken if the implementation of the plan needs adjustments and adaptations due to the situation and conditions. In other words, monitoring will make the implementation of the plan controlled but still flexible under dynamic conditions.

Meanwhile, the evaluation function of human management at SGS is also not implemented. This is evidenced by the fact that there are no guidelines or evaluation documents for human management activities. In fact, with a correct and ongoing evaluation of human management activities, this will affect the quality of teachers' human capital at SGS. For example, if there is a good evaluation of the recruitment system, the SGS Foundation will realize that the recruitment of teachers at SGS through social media has not yet achieved satisfactory results. This is evidenced by the fact that none of the teachers at SGS have been caught through social media.

A good school is if it carries out a planned, systematic, and sustainable monitoring and evaluation function. The managerial function of management which includes planning, implementation, and monitoring and evaluation is a cycle that must be carried out in a disciplined and continuous manner. If one function is neglected, it will interfere with other functions. Inadequate planning will have an impact on the low quality of the implementation function. Organizations will find it difficult to implement what was not planned. Even if there are things that are done, they are not implementation, but sudden and sporadic activities whose impact on the achievement of organizational goals cannot be measured. Without planning, monitoring and evaluation cannot be carried out properly. The supervisory function cannot work because it does not know what is the correct standard. The same applies to the evaluation aspect. Something that can only be judged if something is planned. On the other hand, good planning requires evaluation. The results of the evaluation will be useful data in making plans.

CONCLUSION

Based on the results of the research and discussion of the research results that have been presented in chapter four, it can be concluded:

1. SGS has done some planning but still needs improvement. The planning process for all human management activities which include teacher procurement, teacher development, teacher compensation, teacher maintenance, and teacher separation has not gone well. This conclusion was based on several reasons: first, planning was only carried out by representatives of the Foundation without involving the principal or teachers; second, planning does not go through the results of an analysis based on an evaluation of the existing situation and conditions; third, the content of the plan is incomplete because it does not provide a comprehensive answer to the 5W + 1H pattern; fourth,

planning does not cover all human management activities. Some activities such as job analysis design, development programs, career systems, teacher separation procedures have gone unnoticed, so there is no planning at all; fifth, planning results are not well documented. Some planning documents are only in the form of notes stored on the smartphones of Foundation representatives.

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(psychomotor domain) learning outcomes.

It is possible to evaluate both the cognitive and psychomotor domains [17][18][19]. For example, the cognitive domain is usually measured using test tools such as multiple-choice questions or essays to determine the ability of the theoretical subject matter provided by teachers. Meanwhile, the psychomotor domain uses an action test tool such as the provision of tasks related to the connection of an electric cable. This aims to determine students' skills in the basic electrical engineering field after practical classes are held in the workshop. It is important to note that there will not be an adequate flow of electric current when the cable is not connected properly [20]. This simply shows that the cognitive and psychomotor domains are evaluated based on the theoretical and practical learning outcomes, respectively.

The affective domain emphasizes the learning objectives associated with feelings and emotions regarding the level of rejection or acceptance of an object by an individual, specifically in educational activities at school or college [12]. This means it is possible to assess the success of students studying EB through the affective domain factors and this is the reason it is essential to develop this concept in the learning process using different teaching methods [21][22]. It is also important to note that the use of affective domain teaching techniques can help develop the values related to competence [21].

Problem Statement

Several problems are usually encountered during the learning processes in Technical Vocational High School, specifically concerning EB materials, which subsequently end in failure for students. This is due to the fact that EB concepts are relatively abstract and complex compared to other general materials [8]. The basic needs of students are required to be met in the learning process in order to achieve the outcomes maximally [23]. These basic needs are positive learning attitude factors that stimulate learning and responsibility in students to learn the subject matter. However, they are observed to be missing in the EB learning process, leading to less achievement of both cognitive and psychomotor needs and subsequently inefficient achievement of theoretical and practical learning outcomes. This is because EB teachers are still accustomed to using conventional teaching methods and generally fail to apply affective domain-based techniques despite their ability to contribute to the aspects of the cognitive (theoretical) and psychomotor (practical) domain. Therefore, this research was conducted to highlight the advantages of affective domain-based teaching activities in EB learning to overcome the challenges usually observed in Technical Vocational High School.

Research Purposes

This research aims:

1. To determine the differences in the theoretical learning outcomes EB of students taught using affective domain-based and conventional teaching methods.
2. To determine the differences in the practical learning outcomes EB of students taught using affective domain-based and conventional teaching methods.
3. To understand simultaneously the theoretical and practical learning outcomes EB of students taught using affective domain-based and conventional teaching methods.

LITERATURE REVIEW

Affective Realm

Education taxonomy has three objectives which include the affective, cognitive, and psychomotor domains overlapping each other [10], indicating the ability of the affective aspect to influence the other domains [14][8]. This taxonomy model can be used by teachers to assist students in learning subject matter actively using appropriate teaching strategies [10]. It has been applied to written self-evaluation to assess changes in affective learning [12][24] because the affective domain is focused on the feelings and emotions such as the aspects of attitude, interest,

value, self-concept, and morals of an individual [12][14]. It also has five levels which start from the lowest to the highest level of accepting, responding, value, organization, and characterization [12][24].

Accepting: This is the awareness of the need and willingness to listen as indicated by respectful attention to others and remembering a certain object that has just been introduced. The keyword is to analyze the content related to listening, paying attention, asking, acknowledging, obeying, following, giving, being polite, and understanding. The application of this level in the learning process such as when teachers present the subject matter is expected to improve students' understanding of the concepts being taught.

Respondent: This involves active participation in certain activities, including the provision of adequate response to a certain appearance. The adoption of this level in the learning process is expected to allow students to participate actively and respond obediently to the subject matter. This means the learning outcomes include compliance by willingness and motivation to respond as indicated in students participating actively in different activities such as class discussions, asking questions, making presentations, practicum in the laboratory, practicing skills training in workshops, and complying with work safety regulations. The keywords of this level include obedience, answer, greeting, help, reward, tag, narrate, and show.

Value: This focuses on identifying the ability to assess or value something regarding a particular object, behavior, information, or phenomenon, as well as to express a point ranging from simple to more complex circumstances. The ability of students to confidently internalize the assessment of certain devices can allow the identification and expression of beliefs concerning certain values with explicit behavior such as dealing with value conflicts, expressing confidence in the democratic process, proposing a plan for social improvement and commitment, be sensitive to individual and cultural differences (tolerance of diversity), as well as developing problem management skills. The keywords at this level include demonstrate, appreciate, initiate, join, justify, invite, respect, propose, and others.

Organization: This level is identified through the ability to resolve conflicts, compare and clarify system values as well as focus on comparison, integrated values, and relevance. This is usually reflected in the ability to explain the importance of system planning to solve problems, plan life based on abilities possessed, recognize the need for a balance between freedom and responsibility, prioritize organization, interests, and beliefs, as well as accept ethical standards and self-needs. The relevant keywords include linking, comparing, and synthesizing.

Characterization: This is the highest level of the affective domain which is identified as consistent, predictable, universal, has the ability to contribute to value system formation, and serves as an essential feature of learning. It is also related to the goals of teaching which involve individuals and are directed towards ensuring they socialize and adjust to different emotional forms or patterns. Some of its advantages include working independently, using objective methods to solve a problem, being able to collaborate in a group activity, being able to practice professional ethics, respecting the knowledge of others, and being able to change behavior or beliefs based on newly discovered evidence. The keywords associated with this level are performance, modification, action, verification, discrimination, question, display, qualification, completion, action, and influence.

Previous research showed the significant importance of the affective domain in the learning process [14][8][25][26][27][28][29]. Some others also showed that it is an aspect that can activate students in teaching and learning activities and this is the reason it needs to be explored by teachers. It has been suggested that stakeholders make use of the affective domain in learning activities and also provide training to teachers on the development of affective skills. Moreover, teachers need to design learning activities including the affective domain in order to enhance the related skills of students [23].

Engineering students usually have less interest in theoretical knowledge and this is the reason

most students fail to apply theories in solving practical problems. Therefore, it is necessary to increase their interest in order to overcome these problems [30]. This is considered very important in learning EB through the application of affective domain-based teaching methods.

Conventional Teaching

Conventional teaching is a method normally used by teachers to communicate or convey ideas to students verbally. This means it is centered on teachers while students are passive, thereby leading to boredom in the process of studying a subject matter [31]. Several experts stated that the use of this method has several limitations [32] and is often criticized because it is inefficient, rigid, and outdated [33]. Some educational research also defined this approach as the direct teaching method due to the active role of teachers in presenting the subject matter orally without any active response or activity from students, except to listen and memorize [34].

Teachers normally start classroom discussions with an exclusive focus on knowing the content of textbooks and notes while students receive the information passively, memorize and repeat them in the exams [35]. Many teachers are still using these conventional methods in presenting subject matter in the classroom through lectures accompanied with the notes written on the blackboard, making students feel bored and sleep in the class. The method has been reported to have the ability of limiting the space for students to think creatively and this is the reason to device more advanced methods of teaching [36].

Conventional learning methods are currently being used with several modifications made in line with the demands of different times but their authenticity is maintained. Those methods are mainly centered on teachers rather than students and only concerned with the results and not the process. Students are not placed as learning subjects but as objects and this limits their ability to think optimally and express opinions on the materials being studied. This method is characterized by lectures, assignments or repeated exercises, and deepening of the subject matter [37]. It is also one-directional learning because teachers explain the materials while students only listen and take notes [38].

Theoretical Learning Outcomes

A theory is normally used to develop knowledge [39] and this is the reason the theoretical learning outcome is focused on determining students' thinking ability concerning the subject matter which is considered a cognitive domain. Moreover, it is defined as a rational or scientifically acceptable general principle or a set of principles put forward to explain a phenomenon that has not been proven or considered to be a conjecture [40]. It is also a formal statement on the rules which serve as the foundation of the subject of research or an idea suggested to explain a fact, event, or opinion [41].

The learning activities of grade 10 EB students in the first semester at a Technical Vocational High School are to gain competence in elements properties analysis. Therefore, the theoretical learning outcomes associated with this subject in this research include (1) explaining the meaning of passive electricity (charge, voltage), (2) understanding dynamic electricity (electric current), (3) understanding Ohm's law and resistance, (4) explaining the meaning, function, and calculating the magnitude of electrical components such as resistors, inductors, and capacitors, as well as (5) analyzing (calculating) electrical quantities in series-connected, parallel, and series-parallel combinations.

Practical Learning Outcomes

Technical schools are generally expected to teach basic theory before the practical aspects [30]. This is the reason students are provided some practical lessons after learning the theories associated with the EB theory. Some of these practical lessons include (1) introduction of electrical components such as resistors, inductors, and capacitors, (2) ampere-meter, volt-meter, and ohm measuring instruments, (3) demonstration of how to use the instruments to measure electrical quantities in the components of resistors, inductors, and capacitors, (4) design and

arrangement of components in series, parallel, and series-parallel combinations, and (5) measurement of electrical quantities in circuits with components connected in series, parallel, and series-parallel combinations. Meanwhile, the work safety aspect includes (1) the use of measuring instruments such as ampere-meters, volt-meters, and ohm-meters requires focusing on the polarity (plus-minus) of the instrument and the limit tip, as well as (2) the use of multi-meter instruments requires paying attention to the direction of the selector switch, the polarity (plus-minus) of the instrument, and the limit tip. At the end of the first semester, students are given a practical exam to determine their skills which is an evaluation aspect of the learning process designed to test their knowledge regarding the use of the measuring instruments.

Research Hypothesis

Hypothesis 1:

Ho: There is no difference in theoretical outcomes of learning EB using affective domain-based and conventional teaching methods

Ha: There are differences in theoretical outcomes of learning EB using affective domain-based and conventional methods

Hypothesis 2:

Ho: There is no difference in practical outcomes of learning EB using affective domain-based and conventional teaching methods

Ha: There are differences in practical outcomes of learning EB using affective domain-based and conventional teaching methods

Hypothesis 3:

Ho: There is no simultaneous difference between theoretical and practical outcomes in learning EB using affective domain-based and conventional teaching methods

Ha: There are simultaneous differences between theoretical and practical outcomes in learning EB using affective domain-based and conventional teaching methods

METHOD

Research Design

This research was designed using an experimental method as presented in the following Table 1.

Table 1. Research design

A ₁		A ₂	
Y ₁	Y ₂	Y ₁	Y ₂

Description:

A₁ = groups taught using affective domain-based methods

A₂ = groups taught using conventional methods

Y₁ = theoretical learning outcomes

Y₂ = practical learning outcomes

Participants

The participants used include students in grade 10 semester 1 majoring in electrical engineering at a Vocational High School in North Sulawesi Province with a total of 73. Moreover, experimental and control groups were involved consisting 36 and 37 students who were taught using affective domain-based and conventional teaching methods, respectively. In addition, this research aimed to determine the effectiveness of teaching activities between those two methods.

Affective Domain-Based Teaching Method

The affective domain teaching method applied by teachers stimulated students to have a positive attitude, interest, and values in EB activities. Teachers communicated politely with integrity (morality), had authority, and were respected. It is important to note that a teacher using creative teaching methods normally attracts students and touches their feelings or emotions concerning attitudes, interests, values, and others. The affective domain process of accepting, responding, value, organization, and characterization as stated by [12] was also observed. Moreover, the generation of students' affective domains can lead to an easy understanding of abstract and complex subject matter, ensuring maximal achievement of both theoretical and practical learning outcomes.

Instruments

Theoretical Learning Outcomes Instrument

An instrument in the form of essay questions consisting of 5 indicators and 20 question items presented in Table 2 was used to determine students' theoretical learning outcomes.

Table 2. Assessment Indicators of theoretical learning outcomes

No.	Indicators	Items
1.	Understanding and calculating passive electric quantities (charge, electric field, voltage)	1, 2, 3, 4
2.	Dynamic electricity (electric current)	5, 6, 7
3.	Ohm's law and resistance	8, 9, 10
4.	Definition, function, and calculation of the electrical component magnitude	11, 12, 13, 14, 15, 16
5.	Analyzing (calculating) electrical quantities in electrical circuits connected with single components, series, parallel, and series-parallel combinations.	17, 18, 19, 20
Total Items		20

The questions were validated by three people which include (1) an expert in electrical engineering education, (2) a linguist, and (3) a teacher with teaching experience of over 25 years at a Technical Electro Vocational High School. The validity assessment scale was designed with a Likert scale as stated in the following Table 3.

Table 3. Likert Scale

No.	Score	Description
1.	4	Very valid
2.	3	Valid
3.	2	Invalid
4.	1	Totally invalid

Table 4. The assessment results of the learning theory instrument validity

Evaluator	Score	Average	Description
1	4	3.667	Valid
2	3		
3	4		

Practical Learning Outcomes Instrument

The indicators of the instrument designed for practical learning outcomes are presented in Table 5.

Table 5. Practical learning assessment indicators

No.	Indicators	Items
1.	Providing practice equipment	1
2.	Measuring electrical components such as resistors, inductors, and capacitors.	2, 3, 4
3.	Assembling single, series, parallel, and combined series-parallel connected electrical components	5, 6, 7, 8
4.	Measuring electrical quantities in connected circuits with single, series, parallel, and series-parallel combinations	9, 10, 11, 12
5.	Work safety	13, 14
	Total Items	14

The aspects of practical assessment consider the factors of accuracy and speed in conducting the work practices because they are very important skills required to be possessed by students.

Table 6. The assessment results of the theoretical instrument validity

Evaluator	Score	Average	Description
1	4	4	Valid
2	4		
3	4		

The assessment of each item to determine the theoretical and practical learning outcomes was based on a scale of 0 – 100. Meanwhile, the final score (S_f) concerning students' learning outcomes in EB was calculated through the following formula:

$$S_f = \frac{\sum S_i}{\sum S_{max}} \times 100\%$$

Description:

S_f = Final score obtained by students

$\sum S_i$ = Total score of all items

$\sum S_{max}$ = Maximum score

Data Analysis

The data were analyzed using Multivariate Statistics Analysis of Variance (Manova) with the SPSS program (statistical social science program).

RESULTS

A descriptive test was conducted before the required analysis and hypotheses test, and the results are presented in Table 7.

Table 7. Descriptive Statistics

	Teaching_Method	Mean	Std. Deviation	N
Outcome_Learning_Theory	Affective Domain Method	76,69	7.815	36
	Conventional Method	61,70	8.560	37
	Total	69,10	11.103	73
Outcome_Learning_Practice	Affective Domain Method	77,11	7.524	36
	Conventional Method	63,51	8.332	37



Total	70,22	10.445	73
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Table 7 shows that the mean scores for the theoretical learning outcomes of students in the experimental and control groups are 76.69 and 61.70, while for practical are 77.11 and 63.51, respectively.

Table 8. Normality Test

	Class	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
		Statistic	Df	Sig.	Statistic	df	Sig.
Outcome	OC. Theory of Experiment	.131	36	.121	.963	36	.260
	OC. Practice of Experiment	.098	36	.200*	.975	36	.589
	OC. Theory of Control	.136	37	.080	.959	37	.184
	OC. Practice of Control	.104	37	.200*	.958	37	.177

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

The normality test conducted using the Kolmogorov-Smirnov showed that each significant score was .121, 200, .080, and .200 which are $> .050$ as indicated in Table 8. Therefore, it was statistically proven that the data for each group are normally distributed.

Table 9. Variance Homogeneity Test

		Levene Statistic	df1	df2	Sig.
Outcome	Based on Mean	.587	3	142	.625
	Based on Median	.440	3	142	.725
	Based on Median and with adjusted df	.440	3	140.881	.725
	Based on trimmed mean	.582	3	142	.628

The homogeneity test results for all data groups consisting of the theoretical and practical learning outcomes from the application of affective domains and conventional teaching methods are presented in Table 9. It was discovered that the mean score was $.625 > .050$, showing all research data are included in the homogeneous category.

Table 10. Box's Test of Covariance Matrices^a Equality

Box's M	4.341
F	1.403
df1	3
df2	930523.052
Sig.	.240

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Teaching_Method

Table 10 presents the box M test applied to determine the homogeneity of the covariance matrices as a condition for the Manova analysis. The results showed the box M score was 4.341, indicating the covariance matrices are homogeneous.

Table 11. Levene's Test of Error Variances^a Equality

		Levene Statistic	df1	df2	Sig.
Outcome_Learning_Theory	Based on Mean	1.008	1	71	.319
	Based on Median	.675	1	71	.414
	Based on Median and with adjusted df	.675	1	70.878	.414
	Based on trimmed mean	1.044	1	71	.310
Outcome_Learning_Practice	Based on Mean	.583	1	71	.448
	Based on Median	.570	1	71	.453
	Based on Median and with adjusted df	.570	1	70.955	.453
	Based on trimmed mean	.555	1	71	.459

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Teaching_Method

The data analysis in Table 11 was used to determine the homogeneity of the data distribution on both learning outcomes with the theoretical reported to have a score of .319 while the practical had .310 which are both $> .050$. This means the two data distributions are homogeneous.

Table 12. Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	LO Theory	4100.960 ^a	1	4100.960	60.973	.000	.462
	LO Practice	3373.694 ^b	1	3373.694	53.457	.000	.430
S	LO Theory	349490.714	1	349490.714	5196.215	.000	.987
	LO Practice	360831.229	1	360831.229	5717.511	.000	.988
Teaching_Method	LO Theory	4100.960	1	4100.960	60.973	.000	.462
	LO Practice	3373.694	1	3373.694	53.457	.000	.430
Error	LO Theory	4775.369	71	67.259			
	LO Practice	4480.799	71	63.110			
Total	LO Theory	357396.000	73				
	LO Practice	367798.000	73				
Corrected Total	LO Theory	8876.329	72				
	LO Practice	7854.493	72				

a. R Squared = .462 (Adjusted R Squared = .454)

b. R Squared = .430 (Adjusted R Squared = .421)

Table 12 shows the results for hypotheses 1 and 2 tested and the learning theory was discovered to have obtained a score of $F = 60.973$ with $\text{sig.} = .000 < .050$, indicating Ha in hypothesis 1 is accepted. This means there are differences in the theoretical learning outcomes using affective domain-based and conventional teaching methods. Meanwhile, the practical learning had $F = 53.457$ and $\text{sig.} = .000 < .050$, showing Ha for hypothesis 2 is also accepted. This also means there are differences in practical learning outcomes using the two methods.

Table 13. Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.988	2857.452 ^b	2.000	70.000	.000	.988
	Wilks' Lambda	.012	2857.452 ^b	2.000	70.000	.000	.988
	Hotelling's Trace	81.641	2857.452 ^b	2.000	70.000	.000	.988
	Roy's Largest Root	81.641	2857.452 ^b	2.000	70.000	.000	.988
Teaching_Method	Pillai's Trace	.464	30.240 ^b	2.000	70.000	.000	.464
	Wilks' Lambda	.536	30.240 ^b	2.000	70.000	.000	.464
	Hotelling's Trace	.864	30.240 ^b	2.000	70.000	.000	.464
	Roy's Largest Root	.864	30.240 ^b	2.000	70.000	.000	.464

a. Design: Intercept + Teaching_Method

b. Exact statistic

Table 13 shows the multivariate analysis conducted to test hypothesis 3 and the results for the Pillai's Trace, Wilks' Lambda, Hotelling's Trace, and Roy's Largest Root tests were discovered to be sig. at $.000 < .050$, indicating hypothesis 3 is accepted. This also shows there is a simultaneous difference in the theoretical and practical learning outcomes with the use of both teaching methods.

DISCUSSION

These results are very important to improving EB learning activities as indicated by the findings that the theoretical and practical learning outcomes obtained from using affective domain-based teaching methods were higher than conventional. This also proves that the teaching activities conducted through the conventional methods are less than optimal in assisting the learning process, making several students obtain low scores and reducing their ability to analyze abstract phenomena related to EB. It also shows that teachers using this method are not professional enough considering the fact that they provide material using many words not often understood by students and engage in several teacher-centered activities which normally lead to boredom and sleepiness. Moreover, these teachers do not follow the development plans outlined by educational experts in relation to the subject matter, specifically the phenomena subjects with abstract quantities such as EB. The syllabus for this course requires that students learn the theory first and proceed to the practical aspect in order to test the abstract quantity previously studied. For example, students can analyze or calculate passive electricity consisting of dynamic electricity charge and voltage such as electric current flowing in a closed circuit and later use the practical activities to prove the magnitude of the voltage, resistance, and electric current flowing in a circuit.

The theoretical and practical learning outcomes associated with using affective domain-based teaching methods were found to be higher because the affective domain involves the human mind and the ability to communicate with others [42]. The teaching activities conducted using this method are focused on building communication understandable by students. The method also requires that teachers understand the feelings and emotions of students to ensure they form positive attitudes, interest in learning, and certain learning values towards the EB. Moreover, the Organization for Economic Cooperation and Development (OECD) conducted a survey on social and emotional skills as well as how students relate to an individual, family, and school characteristics to assist the educational leaders or policymakers develop the ability to regulate students' thoughts, emotions, and behavior. This means it is important to have a trade-off between what is taught and what is needed (OECD). In the future, policymakers in the field of education are expected to conduct training activities for teachers, specifically those teaching EB subjects, to form students' affective domains. This is necessary to produce a young generation with intellectual abilities and skills in the field of electrical engineering.

CONCLUSION

The conclusions drawn from the results are stated as follows:

1. There are differences in theoretical learning outcomes EB using affective domain-based and conventional teaching methods.
2. There are differences in practical learning outcomes EB using affective domain-based and conventional teaching methods.
3. There are simultaneous differences in theoretical and practical learning outcomes EB using affective domain-based and conventional teaching methods.

It was discovered that the theoretical and practical learning outcomes obtained for using affective domain-based teaching method in EB were higher than conventional. This is due to its ability to communicate and form thinking skills due to the emotional stimulation of students concerning attitudes, interests, values, and learning motivation. Meanwhile, the conventional teaching method only make students feel bored and sleepy.

ACKNOWLEDGMENT

The authors are grateful to the Ministry of Education for providing funding for this research and the North Sulawesi Provincial Education Office for providing recommendations to collaborate in conducting this research. The authors also appreciate the Chancellor of the Manado State University in particular as well as the head of the Institute for Research and Community Service (LPPM) for providing significant assistance in the research period.

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